CLAIMS:

1.   A method for load balancing in a link aggregation environment comprising the steps of:

determining if a packet flow in a network switch exceeds a predetermined threshold;

determining if said packet flow is a candidate for link switching from a first link to a second link if said packet flow exceeds said predetermined threshold ; and

switching said packet flow from said first link to said second link if said packet flow is determined to be a candidate for link switching.

2.   The method as recited in claim 1, wherein said step of determining if said packet flow is a candidate for link switching further comprises the steps of:

determining if a first packet in said packet flow is larger than a second packet in said packet flow; and

determining if a transmitting queue depth is sufficient to receive said second packet in the packet flow.

3.   The method as recited in claim 2, wherein said step of determining if a transmitting queue depth is sufficient to receive said second packet further comprises the step of determining if a queue depth at said first link plus a number of bits in a current packet is greater than a queue depth at said second link.

4.   The method as recited in claim 1, wherein said switching step further comprises the step of updating a rules table to reflect said switching of said packet flow to said second link.

5.   A method for load balancing in a link aggregation environment comprising the steps of:

determining a length of a first frame and a length of a second frame entering the link aggregation environment;

determining a flow rate of said first frame and said second frame entering the link aggregation environment;

determining if said flow rate exceeds a predetermined flow rate threshold;

determining if said first frame and said second frame are candidates for link switching; and

switching a transmission link for said second frame from a first transmission link to a second transmission link.

6.   The method as recited in claim 5, wherein said step of determining if said first frame and said second frame are candidates for link switching further comprises the steps of:

determining if a link switching value has exceeded a predetermined link switching threshold;

determining if said first frame entering the environment is larger than said second frame entering the environment; and

determining if a transmitting queue depth of said second transmission link is sufficient to receive said second frame switched to said second link.

7.   The method as recited in claim 5, wherein said step of switching a transmission link for said second frame further comprises the steps of:

selecting said second transmission link;

switching a packet transmission flow to said second transmission link; and

updating a rules logic to reflect said switch.

8.   A method for switching a packet flow from a first link to a second link network switch comprising the steps of:

determining if the packet flow is a candidate for link switching; and

switching the packet flow from the first link to the second link.

9.   The method as recited in claim 8, wherein said determining step further comprises the steps of:

determining if a switching frequency is below a predetermined threshold;

determining if a first frame in the packet flow is larger than a second frame in the packet flow; and

determining if a transmitting queue depth of the second link is sufficient to receive said second frame.

10. The method as recited in claim 9, wherein said step of determining if a first frame in the packet flow is larger than a second frame in the packet flow further comprises the steps of:

counting a number of bits in said first frame;

counting a number of bits in said second frame;

comparing said number of bits in said first frame plus a number of bits in a preamble to said number of bits in said second frame; and

determining if said first frame is larger than said second frame based on the comparison.

11. The method as recited in claim 9, wherein said step of determining if a transmitting queue depth of the second link is sufficient to receive said second frame further comprises the step of comparing a queue depth of the first link plus a number of bits in the second frame to a queue depth of the second link.